

Banks, Climate Risk and Financial Stability

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EU Commission JRC Summer School 2019

July, 2nd and 3rd

The views expressed here are those of the author and do not necessarily represent those of Bank of Spain or the euro system

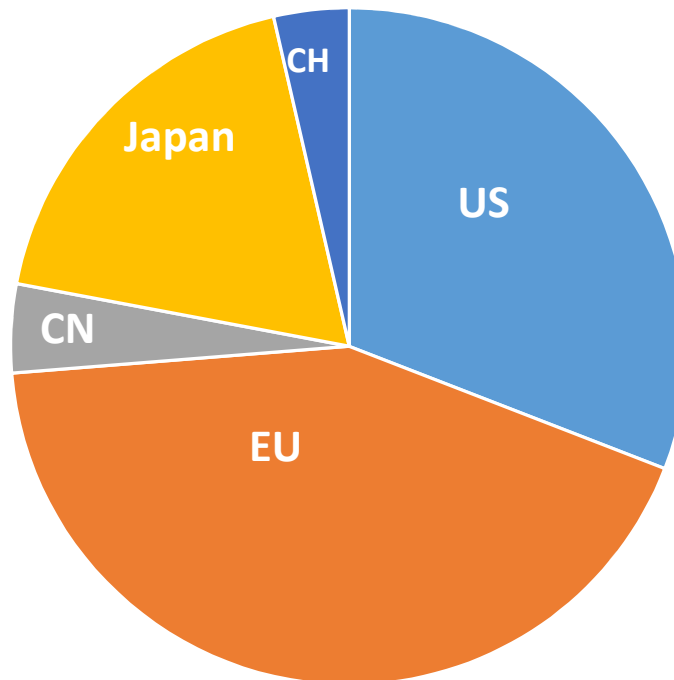
Objectives

- **Quantify** the loan exposure to elevated climate risk sectors of the banking system: Comparison
- Comment on **policy approaches** and tools
 - ✓ Present a **framework of analysis** for the regulatory treatment of climate related risks

Banks' direct lending exposures to high climate risk sectors

| | Battiston et alí (2017) | Nieto (2019) | Weyzig et alli. (2014) |
|------------------|---|---|--|
| Source of data | <ul style="list-style-type: none"> ➤ ECB Datawarehouse: Banks' Sectoral Exposures ➤ Carbon leakage risk classification (EC Directive 2015) <ul style="list-style-type: none"> • Fossil fuel • Energy Intensive • Housing • Utilities • Transport ➤ NACE 2 rev (2 digits) | <ul style="list-style-type: none"> ➤ Thomsom ONE data base (syndicated loans 2014) ➤ Moody's classification <ul style="list-style-type: none"> • Mining - coal • Unregulated Utilities and Unregulated Power companies • Power generation • Oil and gas: refining and marketing; independent exploration and production • Building materials • Chemicals-commodity. • Steel • Mining-Metals and other materials excluding coal • Automobile manufacturers ➤ SIC (4 digits) → NACE 2 rev (4 digits) | <ul style="list-style-type: none"> ➤ Thomsom ONE data base (syndicated loans, 2013) ➤ Sectors <ul style="list-style-type: none"> • Crude petroleum and natural gas extraction; • Natural gas liquid extraction; • Drilling oil and gas wells; • Petroleum refineries (excl. petrochemicals); • Bituminous coal and lignite surface mining; • Bituminous coal underground mining ➤ SIC (4 digits) → NACE 2 rev (4 digits) |
| Geographic focus | Euro area | EU, US, China, Japan, Switzerland | EU |
| Instrument | Loans, bonds, equity | Syndicated loans extrapolated total banking system | Syndicated loans extrapolated total banking system, bonds, equity |
| Lending Exposure | Direct (40-54% equity) and indirect exposures | Direct exposures (46.7% equity) <div style="border: 1px solid blue; border-radius: 50%; width: fit-content; margin: 5px auto; padding: 2px 10px;">€578.2 bill</div> | Direct exposures <div style="border: 1px solid blue; border-radius: 50%; width: fit-content; margin: 5px auto; padding: 2px 10px;">€303 bill</div> |

Country Share in Total % Syndicated loans and excluding bilateral loans



Source: Nieto (2019)

Prudential Policy Approaches and Tools

... Some reflections ...

Core Elements



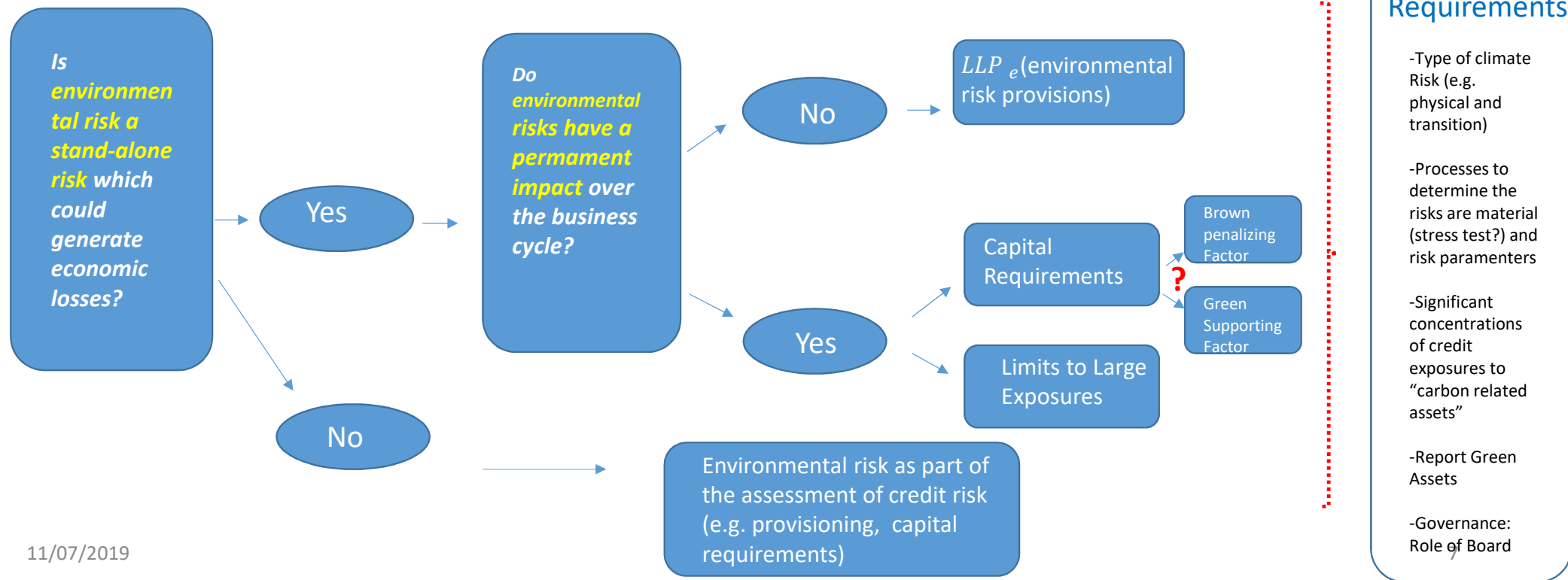
Need adoption by G20!!!!

Source: Task Force on Climate Related Financial Disclosures, June 2017

- ✓ Harmonized Taxonomy
- ✓ Banks' public financial fillings with reliable and harmonized taxonomy NACE Rev 2 (2 digits) SIC (Rev 4) (4 digits)
- CRR II Art 449 a): Large Institutions to publicly disclose info on ESG-related risks, physical and transition
- ✓ Revision BCPs → PS internalize environmental risks in their governance systems and procedures
- CRD V Art 98(8): EBA mandate on how to incorporate ESG into SREP
- ✓ Framework of analysis for the prudential treatment of climate-related risks
- CRR II Art 501c): EBA mandate shall assess whether a dedicated prudential treatmentwould be justified
- ✓ Calibration of asset risk weights aimed at penalizing (brown) / incentivizing (green) (?)
- CRR II Art 501c): EBA mandate shall assess whether a dedicated prudential treatmentwould be justified
- ✓ Credit registers that regularly collect granular credit risk data from banks and other credit institutions
- ✓ Carbon stress test to assess the impact on banks' capital and P&L of an adverse scenario consisting in a disorderly transition to a low carbon economy that could affect systemic risk
- CDR V Art 98(8) b) ...such criteria shall include stress testing processes and scenario analysis to assess the impact of ESG risks under scenarios with different severities

Prudential Policy Approaches and Tools

✓ New prudential regulatory requirements?



Prudential Policy Approaches and Tools

- *Green Supporting Factor vs Brown Penalizing Factor*

| | Quantity | Composition |
|-------------------------|----------|-------------|
| Brown Penalizing Factor | ↓ | ? |
| Green Supporting Factor | ↑ | Green |

Risks
undermine
financial
stability
(*Boot and
Schoenmaker,
2018*)

Anguren, Jimenez, Peydro (2017) → Impact of higher capital requirements on credit supply

Mayordomo and Rodriguez (2017) → Impact of scaling factor for medium size firms

Final reflections: Priorities going forward ...

- The understanding of the nature of “climate risk”
 - ✓ Leading role of the research community
- Coherent, consistent and forward looking environmental policy
 - ✓ Leading role of elected governments ... and the supporting role of Central Banks within the scope of their mandates
 - Central bank objectives should not be compromised: Price and financial stability